BUTTERFLIES ON THE ISLAND OF PÁTMOS (GREECE) IN APRIL 1995, WITH AN UPDATED CHECKLIST AND BIOGEOGRAPHIC NOTES (LEPIDOPTERA: HESPERIOIDEA & PAPILIONOIDEA)

ALAIN OLIVIER

Luitenant Lippenslaan 43 B14, B-2140 Antwerpen, Belgium.

THE GREEK ISLAND of Pátmos (32 km²), of volcanic origin, is situated in the south-east Aegean Sea. To the north, it is flanked by the islands of Sámos, Foúrni and Ikaría. To the south, it is more or less connected to the Bodrum Peninsula (Prov. Muğla, Turkey) through a chain of islands, i.e. Lipsí, Léros, Kálimnos, Psérimos and Kós (Fig. 1). Pátmos is covered mainly with garrigue and, in the vicinity of Skála, the main settlement, orchards.

While the island is rather popular with tourists for its famous monastery, it has been largely ignored by lepidopterists. Olivier (1987) traced one single specimen of *Plebeius loewii loewii* (Zell.) in the collection of the Zoological Museum of Amsterdam. That same year, on 15 July, Dr. George Thomson made some observations on this island, recording six additional species. These records were dealt with by Olivier (1990a; 1993). Further quotations can be found in Olivier (1990b), Olivier & Coutsis (1993; 1995), Hesselbarth, van Oorschot & Wagener (1995) and Tolman & Lewington (1997).

I had the pleasure to stay for two days on this charming little island, on 9 & 10 April 1995. All observations were made on the first day in the immediate vicinity of Skála, from sea level up to about 150m, mostly on waste grounds, along roadsides and in orchards. A planned more extensive investigation of the island on the next day had to be abandoned, because of extremely adverse meteorological conditions (windy, rainy weather at very low temperatures and even a hailstorm!). A couple of additional spring butterflies (lycaenids), that are very likely to occur there, thus remain unknown from Pátmos. Nevertheless, 14 species were recorded, nine of which are newly reported here, bringing the known total up to the present to 16. All these species are known as well from Kós, Kálimnos and Léros (Olivier, 1996, 1997; Olivier & De Prins, 1996), while only one, i.e. Gegenes pumilio pumilio (Hoffmansegg), hasn't been recorded from the Bodrum Peninsula yet (cf. Hesselbarth, van Oorschot & Wagener, 1995). Interestingly, one species, P. loewii loewii, is not found further north than Pátmos in the Aegean, as far as known. Lycaena thersamon (Esper) neither is known to occur on the islands north of Pátmos, though it has been found further north along the Turkish coast at Efes (Prov. Izmir). All remaining species are known from Sámos as well. There is thus but little evidence in favour of any source area rather than another for the present-day butterfly fauna of Pátmos. There is no taxonomic differentiation at all of the

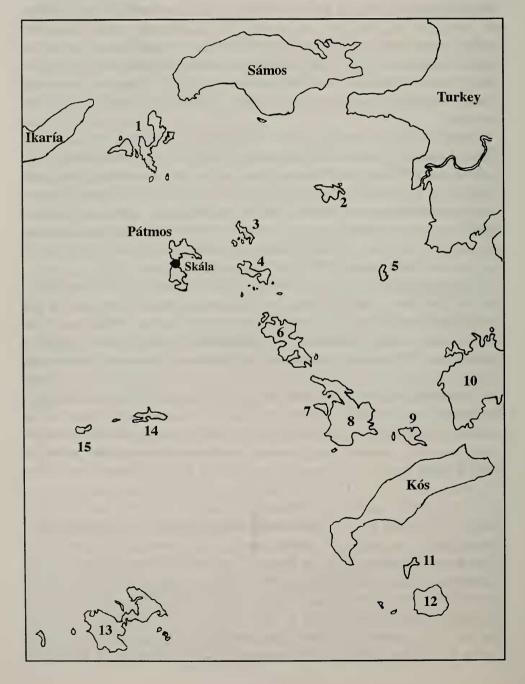
Fig. 1.

Map showing the geographical position of Pátmos in the south-east Aegean Sea.

- 1. Foúrni6. Léros2. Agathoníssi7. Télendos3. Arkí8. Kálimnos4. Lipsí9. Psérimos
- 5. Farmakoníssi
- 10. Bodrum Peninsula
- 12. Níssiros
 13. Astipálea

11. Gialí

- 14. Levítha
- 15. Kínaros



population of any species on Pátmos, as compared to the adjacent island and mainland populations. About 18,000 years B.P. all fore-mentioned islands were part of one single continental land mass, together with Turkey, but at about 9,000 years B.P., Pátmos formed one large island together with Foúrni, equidistant from Sámos (still connected with Turkey) and from the southern chain of islands, that formed one land mass together with the Bodrum Peninsula (van Andel & Shackleton, 1982). *L. thersamon* and *P. loewii loewii* at least may have arrived from the south. There is no evidence supporting a colonisation from the west (Kikládes): four species that occur on Pátmos are unknown from this island group, while two of these (*Maniola telmessia* (Zell.) and *P. loewii loewii*) are not even known from mainland Greece, and a third one, *Zerynthia cerisy cerisy* (Godart) penetrates into the Balkans not further south than northern Greece.

Checklist

Nomenclature used follows Olivier (1993). Species indicated by one asterisk were observed during my April 1995 trip and were previously known from the island; species indicated by two asterisks, also observed on the same trip, are newly recorded for the butterfly fauna of Pátmos.

**	Gegenes pumilio pumilio (Hoffmansegg)
**	Carcharodus alceae alceae (Esper)
**	Zerynthia cerisy cerisy (Godart)
*	Iphiclides podalirius podalirius (Linn.)
*	Papilio machaon syriacus Eller
**	Colias crocea (Fourcroy)
**	Euchloe (ausonia) ausonia taurica Röber
*	Pieris brassicae brassicae (Linn.)
*	Pieris rapae rapae (Linn.)
**	Lycaena phlaeas phlaeas (Linn.)
**	Lycaena thersamon (Esper)
	Plebeius loewii loewii (Zeller)
**	Polyommatus icarus (Rottemburg)
	Maniola telmessia (Zeller)
**	Vanessa atalanta atalanta (Linn.)
*	Vanessa cardui (Linnaeus)

References

Andel, T.H. van & Shackleton, J.C., 1982. Late Palaeolithic and Mesolithic Coastlines of Greece and the Aegean. *Journal of Field Archaeology* **9**: 445-454.

Hesselbarth, G., Oorschot, H. van & Wagener, S., 1995. Die Tagfalter der Türkei unter Berücksichtigung der angrenzenden Länder. Selbstverlag Sigbert Wagener, Bocholt.

Olivier, A., 1987. Catalogue of the butterflies of the Greek islands in the collection of the Instituut voor Taxonomische Zoölogie (Zoölogisch Museum) Amsterdam (Lepidoptera: Hesperioidea & Papilionoidea). *Phegea* 15: 77-88, 165-170.

- , 1990a. Butterfly records from the Greek island of Pátmos (Lepidoptera: Papilionoidea). *Phegea* 18: 31-32.
- , 1990b. Critical notes on the butterflies of the Greek island of Kastellórizo (Lepidoptera: Hesperioidea & Papilionoidea). *Phegea* 18: 169-190.
- -, 1993. The butterflies of the Greek island of Ródos: taxonomy, faunistics, ecology and phenology with a tentative synthesis on the biogeography of the butterflies of Kríti (Crete), Kárpathos, Ródos, the Eastern Aegean islands and Kípros (Cyprus) (Lepidoptera: Hesperioidea & Papilionoidea). Vlaamse Vereniging voor Entomologie, Antwerpen.
- , 1996. The butterflies of the Greek island of Kálimnos (Lepidoptera: Hesperioidea & Papilionoidea). *Phegea* 24: 149-156.
- -, 1997. The butterflies of the Greek island of Léros (Lepidoptera: Hesperioidea & Papilionoidea). *Phegea* 25: 123-128.
- Olivier, A. & Coutsis, J.G., 1993. Notes on *Maniola telmessia* (Zeller, 1847) from the Eastern Aegean islands, with new insights about its populations on the Greek islands of Kárpathos and Kássos (Lepidoptera: Nymphalidae Satyrinae). *Phegea* **21**: 113-130.
- , 1995. Rhopalocera of Turkey 13. Sympatry and supposed gene exchange between Maniola telmessia (Zeller, 1847) and Maniola halicarnassus Thomson, 1990 on the Bodrum Peninsula (SW. Turkey) vs. evidence for their specific distinctness: two sides of the same coin (Lepidoptera: Nymphalidae Satyrinae). Entomobrochure 7: 1-60.
- Olivier, A. & Prins, R. De, 1996. The butterflies of the Greek island of Kós: a synthesis (Lepidoptera: Hesperioidea & Papilionoidea). Nota Lepidopterologica 19: 185-211.
- Tolman, T. & Lewington, R., 1997. Field Guide to Butterflies of Britain and Europe. Collins.

Hazards of butterfly collecting - last flight to Natitingou

In 1978 I found myself a member of a rather large family planning evaluation mission to Benin in West Africa. It was a paranoid place at the time, a point which was driven home to us on the way from the airport to Cotonou, where banners exhorted "eternal vigilance" and "death to traitors". It was driven home again, but even more strongly that night when volleys of shots brought death to that day's crop of traitors.

Our hosts proudly proclaimed, "Your internal travel permits have already been authorised. As soon as we receive them, we can plan your field visits." In the meantime we visited government ministries and development agencies, as one does on such missions. "Photography is only permitted in the tourist-authorised areas of the stilt village of Ganvie. However, even here we have reports of tourists being arrested for taking photographs. We recommend you do not attempt to take pictures", said a sign at the US Embassy.

For reasons that I have now forgotten, it was deemed essential that part of our group went to Natitingou, in the extreme north-east of the country. Given our timing, it had to be by air. The only air transport was provided by the Benin Air Force. They had only two serviceable aircraft. Our status was sufficient to book one, though we had to share with a delegation from the *African Friendship Committee of the Association of Siberian Agricultural Cooperatives* – I kid you not!

One fine morning we assembled at the Air Force base at Cotonou Airport. Coffee was served. We were introduced to the members of the friendship